Application No.: 10/616,960 4 Docket No.: 8733.160.20-US

REMARKS

Claims 7, 9 and 10 are currently pending, wherein claims 11-16 have been canceled. Applicants respectfully request favorable reconsideration in view of the remarks presented herein below.

In paragraph 2 of the Office Action ("Action"), the Examiner rejects claim 11 under 35 U.C.S. 112, second paragraph, as allegedly being indefinite. Applicant hereby cancels claim 11, rendering this rejection moot.

In paragraph 3 of the Action, the Examiner objects to claims 12 because of a typographical error. Claim 12 has been canceled rendering this object moot.

In paragraph 6 of the Action, the Examiner rejects claims 7 and 10-16 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,825,449 to Shin ("Shin '449") in view of U.S. Patent No. 5,963,279 to Taguchi ("Taguchi"). Claims 11-16 have been canceled rendering this rejection moot with regard thereto. With regard to claims 7 and 10, Applicant respectfully traverses this rejection.

In order to support a rejection under 35 U.S.C. §103(a), the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be a some motivation to combine the cited references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 7 and 10-16 are not rendered unpatentable over the combination of Shin '449 and Taguchi because the Examiner fails to establish a *prima facie* case of obviousness as discussed below.

In rejecting claims 7 and 10, the Examiner asserts that shin '449 discloses a liquid crystal display with all of the claimed elements, except the passivation layer exposing the

gate insulating layer except portions of the gate insulating layer where the data wire, thin film transistor, and pixel electrode are formed. In addition, the Examiner asserts that Taguchi discloses a method of preventing short circuits between the pixel electrode and neighboring electrodes by etching around the border of the pixel electrode. Therefore, the Examiner concludes that it would have been obvious to one skilled in the art to use Taguchi's method of preventing defects in the device of Shin '449 in order to eliminate short circuits between the electrodes. The Examiner's conclusion is unfounded for the following reasons.

As stated in section 2143.03 of the MPEP, "[t]he mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In rejecting claims 7 and 10, the Examiner asserts that one skilled in the art would have been motivated to etch around the border of the pixel electrode as taught by Taguchi in order to prevent short-circuits between the pixel electrode and the neighboring electrode. However, as noted by the Examiner, the pixel electrode in the device of Shin '449 is located above the passivation layer. As a result, the LCD device of Shin '449 is not susceptible to short circuits between the pixel electrode and neighboring electrodes because the pixel electrode is formed after the passivation layer. Accordingly, one skilled in the art would not have been motivated to added an additional etching step (i.e., etching around the pixel electrode) as suggested by the Examiner to achieve a benefit already achievable by the device without modification because the added step would increase the manufacturing costs without providing any added benefit.

Accordingly, absent proper motivation to combine Shin '449 and Taguchi, the rejection of claims 7 and 10-16 is improper. Therefore, Applicant respectfully requests

reconsideration and withdrawal of the rejection of claims 7 and 10 under 35 U.S.C. §103(a).

In paragraph 7 of the Action, the Examiner rejects claims 7 and 9-16 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,737,049 to Shin et al. ("Shin '049") in view of Taguchi, further in view of Shin '449. Claims 11-16 have been canceled rendering this rejection moot with regard thereto. With regard to claims 7, 9 and 10, Applicant respectfully traverses this rejection.

As discussed above, in order to support a rejection under 35 U.S.C. §103, the office action must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness the Examiner, among other things, must provide motivation to combine the cited references. In the present case, claims 7, 9 and 10 are not rendered unpatentable over the combination of Shin '049, Taguchi and Shin '449 for at least the reason that the Examiner fails to provide proper motivation to combine the cited reference as discussed below.

In rejecting claims 7, 9 and 10, the Examiner asserts that shin '049 discloses a liquid crystal display with all of the claimed elements, except the passivation layer exposing the gate insulating layer except portions of the gate insulating layer where the data wire, thin film transistor, and pixel electrode are formed. In addition, the Examiner asserts that Taguchi discloses a method of preventing short circuits between the pixel electrode and neighboring electrodes by etching around the border of the pixel electrode. Therefore, the Examiner concludes that it would have been obvious to one skilled in the art to use Taguchi's method of preventing defects in the device of Shin '449 in order to eliminate short circuits between the electrodes. The Examiner's conclusion is unfounded for the following reasons.

Again, the mere fact that references can be combined does not in and of itself render the resultant combination obvious absent proper motivation to combine the cited references. In rejecting claims 7, 9 and 10, the Examiner asserts that one skilled in the art would have been motivated to etch around the border of the pixel electrode as taught by Taguchi in order to prevent short-circuits between the pixel electrode and the neighboring electrode. However, as noted by the Examiner, the pixel electrode in the device of Shin '449 is located above the passivation layer. As a result, the LCD device of Shin '449 is not susceptible to short circuits between the pixel electrode and neighboring electrodes because the pixel electrode is formed after the passivation layer. Accordingly, one skilled in the art would not have been motivated to added an additional etching step (i.e., etching around the pixel electrode) as suggested by the Examiner to achieve a benefit already achievable by the device without modification because the added step would increase the manufacturing costs without providing any added benefit.

Accordingly, absent proper motivation to combine Shin '049, Taguchi and Shin '449, the rejection of claims 7, 9 and 10 is improper. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 7, 9 and 10 under 35 U.S.C. §103(a).

The application is in condition for allowance. Notice of same is earnestly solicited. Should the Examiner find the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required

under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: April 25, 2005

Respectfully submitted,

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